

4 **ABSTRACT**

5 A floating drilling rig configured for performing drilling operations while
6 floating on a body of water is modified to become a converted vessel
7 configured for performing drilling operations while resting on bottom by
8 attaching a support barge component adapted to add rest-on-bottom
9 functionality. The support barge component has a ballast system that alone
10 or by supplementing the ballast system of the floating drilling vessel enables
11 the floating drilling vessel to be ballasted to rest on bottom. The ballast
12 system of the support barge component is adapted to be opened to the water
13 to fill and drain as the water level raises and lowers, and thereby maintain a
14 constant soil pressure. The support barge component may also have a
15 suction breaker system to break suction formed between the support barge
16 and bottom. If the floating drilling rig component was previously classified for
17 service in a defined body of water, the support barge may enable
18 reclassification of the converted vessel for service outside the defined body of
19 water.